

CLAIM AMENDMENTS

Claim 1. (currently amended) A welding apparatus with two electrode carriers which can be moved relative to one another by a drive unit, can be mounted with electrodes and together with the drive unit form an assembly which is mounted in a floating position on at least one linear guide (1), characterized in that the assembly is held in a base position position, from which the electrode carriers (6, 12) can be transferred to the welding position, by means for compensating for its weight, the drive unit being formed by a servomotor (9), which can be used to drive two spindles (8, 14) which are provided with opposing screw threads, are arranged parallel to the linear guide and engage with nuts assigned to the electrode carriers (6, 12).

Claim 2. (original) The welding apparatus as claimed in claim 1, characterized in that it is equipped with a brake (20), by which the assembly formed by the electrode carriers (6, 12) and the servomotor (9) can be locked on the linear guide (1).

Claim 3. (previously presented) The welding apparatus as claimed in claim 2, characterized in that three carriages (2, 3, 4) are mounted on the linear guide (1).

Claim 4. (previously presented) The welding apparatus as claimed in claim 3, characterized in that the carriage (3) connected to the servomotor (9) can be locked by the brake (20).

Claim 5. (previously presented) The welding apparatus as claimed in claim 4, characterized in that a brake rail (18), which can be locked by a piston (19) of the brake (20), is connected to the carriage (3) carrying the servomotor (9).

Claim 6. (previously presented) The welding apparatus as claimed in claim 1, characterized in that the servomotor (9) is arranged between the electrode carriers (6, 12).

Claim 7. (previously presented) The welding apparatus as claimed in claim 1, characterized in that the spindles (8, 14) are connected, via clutches (10, 15), to opposite shaft stubs (11, 16) of the shaft of the servomotor (9).

Claim 8. (previously presented) The welding apparatus as claimed in claim 7, characterized in that the clutches (10, 15) are designed as slipping clutches.

Claim 9. (currently amended) The welding apparatus as claimed in claim 1, characterized in that the spindles (8, 14), which can be driven by the servomotor (9), engage with nuts at those ends of the electrode carriers (8, 12) which are remote from the electrodes (7, 13).

Claim 10. (previously presented) The welding apparatus as claimed in claim 1, characterized in that the means for compensating for its weight are formed by at least one spring (21).

Claim 11. (previously presented) The welding apparatus as claimed in claim 1, characterized in that the means for compensating for its weight are formed by a pneumatic cylinder.

Claim 12. (previously presented) The welding apparatus as claimed in claim 1, characterized in that the linear guide (1) is provided with end stops (22, 23).

Claim 13. (previously presented) The welding apparatus as claimed in claim 1, characterized in that three carriages (2, 3, 4) are mounted on the linear guide (1).

Claim 14. (previously presented) The welding apparatus as claimed in claim 2, characterized in that the servomotor (9) is arranged between the electrode carriers (6, 12).

Claim 15. (previously presented) The welding apparatus as claimed in claim 3, characterized in that the servomotor (9) is arranged between the electrode carriers (6, 12).

Claim 16. (previously presented) The welding apparatus as claimed in claim 2, characterized in that the spindles (8, 14) are connected, via clutches (10, 15), to opposite shaft stubs (11, 16) of the shaft of the servomotor (9).

Claim 17. (currently amended) The welding apparatus as claimed in claim 2, characterized in that the spindles (8, 14), which can be driven by the servomotor (9), engage with nuts at those ends of the electrode carriers (8, 12) which are remote from the electrodes (7, 13).

Claim 18. (previously presented) The welding apparatus as claimed in claim 2, characterized in that the means for compensating for its weight are formed by at least one spring (21).

Claim 19. (previously presented) The welding apparatus as claimed in claim 2, characterized in that the means for compensating for its weight are formed by a pneumatic cylinder.

Claim 20. (previously presented) The welding apparatus as claimed in claim 2, characterized in that the linear guide (1) is provided with end stops (22, 23).